

BOOK: Child and Adolescent Exposure to Online Risks

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CHAPTER: Understanding Child and Adolescent Cyberbullying

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Understanding Child and Adolescent Cyberbullying

Abstract

Global development of digital technologies has provided considerable connectivity benefits. However, connectivity of this scale has presented a seemingly unmanageable number of potential risks to psychological harm especially experienced by children and adolescents; one such risk is cyberbullying. This chapter will initially address the origins of bullying, leading into an overview of cyberbullying. A review of the unique characteristics of online communication will shed light on the ongoing debate concerning cyberbullying being potentially more than an extension of traditional bullying. Current research findings encompassing prevalence, types of behaviour, consequences, and the roles within cyberbullying activity will be discussed to guide future interventions to reduce the risk vulnerability for children and adolescents. In parallel, this chapter also considers the relative and perhaps distorted risk perception that young people have of becoming a cyber-victim. Finally, this chapter acknowledges current understanding to support future digital and social involvement.

5 key words – Cyberbullying, online bullying, predictors, interventions, risk perception.

Introduction

Aggression can provide a useful foundation when considering the origins of studying bullying within the research community. Aggressive behaviour consists of many different behaviours including verbal aggression, physical fighting, and other forms of violence. The term aggressive behaviour is often defined as an act where the behaviour is intended to cause harm to another individual, who wishes not to be harmed (Duncan & Hobson, 1977).

Extending this definition of aggression, scholars started to define a new type of behaviour:

bullying. Dan Olweus in the early 1970s was the first to provide a definition for the term bullying based on his research with children in Sweden and Norway. Recognised as a pioneer of bullying research, Olweus defined bullying as a sub-set of aggressive behaviour, which is intended to cause harm to a less powerful victim, over a repeated period, inflicted by one or more individuals (Olweus, 1978). While the definition includes three distinct criteria: (1) intention to cause harm, (2) repetition, and (3) imbalance of power between the perpetrator and victim which favours the perpetrator, it is only two criteria that differentiates the behaviour from aggression. For example, aggression can constitute a single act of aggressive behaviour, whereas bullying is conceptualised as a persistent process where the perpetrator repeatedly inflicts harm to their victim. In addition, while aggression can occur between individuals of equal power, bullying is differentiated through a power imbalance where the victim is unable to defend themselves from a more powerful perpetrator (Dooley, Pyżalski, & Cross, 2009).

Bullying has been an international concern since the early 1970s (Heinemann, 1973; Olweus, 1978, 2003; Smith, 2016), and is especially problematic in the school environment. As an umbrella term, bullying also is differentiated across several sub-types: namely physical, verbal, and relational forms of bullying. Physical forms of bullying are often characterised by behaviours that include punching, hitting, kicking, and other behaviours that involve bodily harm. Verbal bullying includes acts of a nonphysical nature but are verbally perpetrated with name-calling, shouting, and teasing. Further, relational bullying encompasses acts of a nonphysical and nonverbal nature, including rumour circulation and social exclusion (Aoyama & Talbert 2009; Smith, 2016). In the context of child and adolescent involvement, bullying is regarded as a dyadic process between a victim and a perpetrator, which is often perpetrated in the school environment. However, involvement in bullying also includes those who do not actively participate or take part, but witness the

bullying, also known as bystanders (Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996). The role of bystanders will be discussed later in this chapter.

To help consolidate what we know about bullying and build a strong basis of evidenced preventive strategies, it is important that scholars and practitioners use a consistent definition of bullying (Olweus, 2013), as a lack of consensus can impact on the reported prevalence rates (Younan, 2019). This suggests a need to clarify a unified definition of bullying, and how such criteria may extend to the online domain, to help explain child and adolescent cyberbullying.

Emergence of Cyberbullying

The continued development of digital technologies has provided a platform for children and adolescents to communicate with each other in the online domain. Such development has offered positive opportunities to maintain social interactions, and a new platform for educational learning, providing social and recreational use (Livingstone et al., 2017). However, this availability of technology has also presented a variety of platforms for children and adolescents to bully online in a more accessible and easy manner (Livingstone, Haddon, Vincent, Mascheroni, & Ólafsson, 2014). As the development of digital technology continues to proliferate, socialisation agents including teachers, school management, parents, and media officials are becoming more interested in the ways children and adolescents engage with, and use, the Internet. However, such socialisation agents, particularly those engaged in the school environment have been slow to address the issue (Aoyama & Talbert, 2009). Therefore, it is important to consider the definitional aspects of cyberbullying in order to provide context to understand child and adolescent victimisation of such bullying acts.

Cyberbullying is widely regarded as “an aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and over time against a

victim who cannot easily defend him or herself” (Smith et al. 2008, p. 376). The definition to an extent runs parallel to that of traditional bullying, differentiated by the perpetration of the act through the use of electronic means (Hinduja & Patchin, 2014; Olweus & Limber, 2018; Smith et al., 2008; Smith, Steffgen & Sittichai, 2013; Smith, 2015). Considering the historical coinage of cyberbullying, this is widely accepted to be by the Canadian Bill Belsey via his website (<http://www.cyberbullying.ca>) in 2003 (Bauman & Bellmore, 2015). However, the earliest records of the term go back as far as 1995 in a New York Times article (Bauman, 2014). The debate around the conceptualisation of cyberbullying is one that continues to be an issue amongst scholars and practitioners. While there are similarities and differences in the definition, it is important to achieve a consensus on what constitutes cyberbullying, compared to other variations of the definition (Kiriakidis & Kavoura, 2010).

While the definition of bullying originally proposed by Olweus (1978) has been used to explain cyberbullying, there are clear definitional issues in its application, particularly surrounding the elements of repetition and power imbalance (Kofoed, & Staksrud, 2018). On the one hand, the distinction of repetition in cyberbullying can be portrayed when a perpetrator continually sends aggressive texts to the targeted victim (Slonje & Smith, 2008). However, on the other hand, the notion of repetition becomes more ambiguous when a perpetrator performs a single derogatory act (i.e., uploading an embarrassing picture or comment which many people can see), because the extent to which the intended picture/message is shared by others is unknown. This suggests that while repetition may not be as clear in the cyberbullying domain in terms of the perpetrator, it is the extent to which it is shared by others that is more important (Vandebosch & van Cleemput, 2008). In addition, while some cyberbullying acts may not necessarily be shared numerous times, it is the perception of the victim on the possibility that other people can see the material, which inevitably leads to the psychological harm (Dooley et al., 2009). In some cases, the material

can still be accessed years after the event and therefore presents prolonged exposure to the victim, meeting the criteria of repetition (Dooley et al., 2009).

In addition, the criterion of imbalance of power can also be difficult to operationalise in the context of cyberbullying. While in the traditional sense this can be portrayed as physical strength or power, in the cyber domain, power imbalance is more challenging to conceptualise. However, the technological skill of using digital technology and online mediums can be argued as an example of power imbalance in the context of cyberbullying (Smith, 2015). In this sense the perpetrator may have a greater Information Communication Technology (ICT) skill enabling them to target their victims in different ways. On the other hand, it could be argued that sending an aggressive text message or uploading an embarrassing photograph only requires basic ICT skill and therefore the power imbalance may not be as clear cut in the online domain (Campbell & Bauman, 2018; Dooley et al., 2009). Despite this, the unique feature of anonymity in cyberbullying where the perpetrator can conceal their identity could provide an actual or perceived power imbalance. This will be discussed in more detail later in this chapter. The definitional feature of power imbalance has been identified as a key characteristic when young people define cyberbullying, which they perceive to be most severe compared to other criterion, suggesting the relevance of a power dynamic for both traditional and cyber forms of bullying (Luik & Naruskov, 2018).

While the criteria of intention present clear boundaries in the physical world, scholars have recognised the difficulty to distinguish intention to cause harm from other intentions in cyberbullying due to the ambiguous nature of cyberbullying (Menesini & Nocentini, 2009). Extending this principle, it can be argued that even unintentional acts of cyberbullying (i.e., the perpetrator is unaware of their actions or the impact on the victim) have the same negative consequence as intentional acts. This suggests a need to take more consideration of the victims' perspective when evaluating a potential cyberbullying situation (Nocentini et al.,

2010). It is clear there are definitional issues when applying the traditional criteria of bullying to explain cyberbullying and, as such, this suggests a need to explicitly refine the definition of cyberbullying to avoid misinterpretation (Berne et al., 2013; Langos, 2012; Smith, 2019; Thomas, Connor, & Scott, 2015; Tokunaga, 2010). A recent systematic review of cyberbullying definitions between 2012 and 2017 identified 24 variations of the definition (Peter & Petermann, 2018). Comparisons across these definitions identified five defining attributes, although there was a total of 15 attributes identified. This highlights the large variability in how cyberbullying is defined and consequently measured. The most important attributes to define cyberbullying were: (1) intention to inflict harm, (2) imbalance of power, (3) repetition, (4) direct and indirect cyberbullying (i.e., private versus public), and (5) perception (i.e., if the victim perceived the behaviour harmful or not). To achieve a consensus regarding the definition of cyberbullying, future research should consider using qualitative research to discuss these attributes with children and adolescents to confirm the applicability of these core elements to create a unified definition of cyberbullying which can be shared across researchers (Peter & Petermann, 2018). It is also important to consider how unique features associated with cyberbullying can help explain the phenomenon.

Unique Features Associated with Cyberbullying

Children and adolescents are spending more time online as it has become the main means for communication within social groups (Mishna, Saini & Solomon, 2009). Considering the unique features associated with cyberbullying, researchers have identified anonymity and publicity as additional features. For example, while uploading an embarrassing picture may be a single one-off event, hence not meeting traditional criteria of repetition, it is the repeated exposure to the victim and size of the audience that present prolonged consequences, and so the degree of publicity is implicated (Dooley et al., 2009). In

addition, the opportunity to share online material numerous times, while concealing one's identity, illustrates the issues of instant dissemination and anonymity associated with cyberbullying (Smith, 2015; Thomas et al., 2015).

Even in traditional bullying, perpetrators can conceal their identity, so anonymity may not be a new unique attribute solely relevant for cyberbullying. However, in cyberbullying, the ability to remain anonymous is easier. For example, research has shown that often victims of cyberbullying do not know the identity of their perpetrator (Kowalski & Limber, 2007; Li, 2007). On the other hand, other research has shown that approximately two thirds of victims were able to identify their perpetrator when they have been cyberbullied online (Juvonen & Gross, 2008). As outlined by Smith et al. (2008), it was the anonymity of cyberbullying that was regarded as a key difference to that of traditional bullying. This is because when the victim is unaware of a perpetrator's identity, this can lead to frustration, helplessness, and anxiety (Dooley et al., 2009; Slonje & Smith, 2008), and so implies a greater degree of negative consequences associated with cyberbullying. However, other scholars argue that these elements should not be regarded as key attributes when defining cyberbullying. For example, in terms of the anonymity, not all cases of cyberbullying are anonymous and sometimes the perpetrator may not be able to conceal their identity. While anonymity is easier to achieve with cyberbullying compared to traditional bullying, it should remain as a unique feature rather than a defining attribute (Campbell & Bauman, 2018). To support this notion, anonymity can also be associated with traditional bullying, especially with regards to relational bullying with the spreading of rumours (Smith et al., 2013). As such, cyberbullying only offers increased anonymity due to the lack of physical presence and varying ways of communicating online.

In addition to anonymity, the nature of publicity and the associated wider audience has also been implicated as a unique feature in cyberbullying. In this sense, perpetrators of

cyberbullying can target their victims via private, semi-public, and public means (Dooley et al., 2009; Thomas et al., 2015). The increased accessibility and availability of online communication means young people have more opportunities to target victims online. Further, the potential for an unlimited audience online may act as a motivator for the perpetrator to target victims more publicly to increase the humiliation and embarrassment for the victim (Campbell & Bauman, 2018). While the internet can provide increased opportunities to maintain social interactions and provide a platform for educational resources and learning (Livingstone et al., 2017), it can also provide opportunities for perpetrators to reach a larger audience and disseminate material quickly via public spaces (Heirman & Walrave, 2008). This constant availability to target victims 24/7 means victims of cyberbullying are potentially unable to escape (Englander, Donnerstein, Kowalski, Lin, & Parti, 2017; Selkie, Fales, & Moreno, 2016). When victims are targeted more publicly, there is less control as information can be shared and distributed more easily compared to private forms of communication. If cyberbullying is more public, it can be more embarrassing for the victim (Dredge, Gleeson, & De La Piedad Garcia, 2014; Pieschl, Kuhlmann, & Porsch, 2015; Sticca & Perren, 2013), and so public instances of cyberbullying can be regarded as more severe. This suggests a need to place more importance on the feature of publicity when conceptualising and addressing cyberbullying.

In relation to what constitutes cyberbullying, students perceive anonymity and publicity as less important factors when labelling behaviours as cyberbullying, compared to key elements of intent, repetition, and power imbalance (Luik & Naruskov, 2018). However, the notion of anonymity has been regarded as a key characteristic in cyberbullying in terms of its potential outcome. Anonymity has been associated with the increased severity of outcomes with students perceiving cyberbullying to be more serious than traditional bullying (Sticca & Perren, 2013). The difficulty in defining cyberbullying is attributed to the

ambiguous nature of the acts and the fact cyberbullying can take a variety of different forms. In addition, a key difference with cyberbullying is the lack of physical presence, leading to a lack of emotional reactivity. In traditional bullying, perpetrators would likely see the impact their behaviour had on the individual, whereas with cyberbullying there is a lack of physical or verbal cues. This could trigger prolonged victimisation. In addition to this, in the online domain it is less likely there will be an authority figure present. In the school environment teachers are present to regulate and police behaviour. In the online environment the victim could potentially experience a solitary act of victimisation, with a lack of control and authority presence, enabling perpetrators to act without immediate consequences and with disinhibition (Kowalski, Giumetti, Schroeder, & Lattanner, 2014; Suler, 2004). Recognising the unique features of cyberbullying and the complexity of defining cyberbullying is important with regards to accurately determining the prevalence of cyberbullying.

Prevalence of cyberbullying

Like adults, children and adolescents are accessing the internet as part of their daily routine via smartphone, tablet, laptop, or television. For the United Kingdom, Ofcom (2018) report 93% of 8-11-year-olds have access to the internet for 13.5 hours a week and 18% of this age group also have a social media profile. For the 12-15-year-old age group, 99% spend on average 20.5 hours a week, with 69% having a social media profile. Looking at a younger age group, Pons-Salvador, Zubieta-Méndez, and Frias-Navarro (2018) used parent self-report questionnaires and found that 40% of children aged between 6 and 9 were able to sometimes access the internet without supervision. From this study, it also became apparent that not all parents are able to change the parental control settings on a device (57%), know how to set up content filters (42%), or know how to block unwanted advertisements (40%). Findings from

this study highlight how risk awareness should lead onto manageable implementation of practical measures such as parental guidance.

Cyberbullying prevalence rates for different age groups are inconclusive and mixed. For adolescents over the age of approximately 11, younger age groups are involved with less cyberbullying than the older age groups (Hinduja & Patchin, 2008; Kowalski, Limber, & Agatston, 2012; Modecki, Minchin, Harbaugh, Guerra, and Runions, 2014; Schultze Krumbholz et al., 2015) for victimisation (Taraptar & Kellet, 2013; Tokunaga, 2010; Williams and Guerra 2007) and perpetration (Barlett & Coyne, 2014; Del Rey et al., 2016; Ybarra & Mitchell; 2004a, 2004b). For the time recall period of 6 months, a scoping review of 159 studies published between 2004 and 2014 found prevalence ranges for cybervictimisation to be between 1.6% and 56.9% and perpetration between 1.9% and 79.3% (Brochado, Soares, & Fraga, 2017). Although highly advantageous, it would be inappropriate to pinpoint an age where cyberbullying activity occurs the most as research findings are varied. Reported prevalence of cyber victimisation and perpetration are dependent on methodological variations between research studies. For example, which instrument is used to measure cyberbullying and how reliable it is, variation in time recall periods (in the last six months, in the last year), and demographic features of the sample (Kowalski, Limber & McCord, 2019). The ongoing debate conceptualising cyberbullying within the literature, although necessary, hinders the development of a homogenous definition, which in turn makes measuring the phenomenon problematic (Berne et al., 2013).

Considering prevalence rates of younger age groups of children, what is known is that limited research has been conducted with young people below the age 11. However, it is clear cyberbullying is experienced by the younger age group. Monks, Robinson, and Worlidge (2012) report cyberbullying involvement of 20.5% for self-identified victims and 5% identified as perpetrators of cyberbullying for a sample with an age range of 7-11. Despite

this, and the considerable evidence for cyberbullying prevalence in upper age ranges, cyberbullying still is only moderately regarded in anti-bullying policies in primary (32%) and secondary (52%) educational establishments in the UK (Smith et al., 2012). Future longitudinal research concerning a sample that includes younger children and adolescents would be more effective and practical for researching prevalence rates of cyberbullying.

Cyberbullying behaviours

Generally, classification of cyberbullying behaviours can be viewed from Willard's (2007) taxonomy. Behaviours include flaming (i.e., arguments), harassment (i.e., offensive and repetitive messages), denigration (i.e., posting negative, harmful, or untrue information about another), impersonation (i.e., pretending to be another and posting information that reflects upon them badly), outing/trickery (i.e., gaining another's personal information and sharing it without consent), exclusion (i.e., intentionally excluding or blocking another from online communication), and cyberstalking (i.e., repetitively sending offensive and threatening messages to another).

Types of cyberbullying behaviours can manifest as written-verbal behaviours (during a phone call, in one to one or group text messages, or on social media) or as visual behaviours (such as posting or sharing media without consent, photographs, or videos; Nocentini et al., 2010; Palladino, Nocentini, & Menesini, 2015). Langos (2012) dichotomized types of cyberbullying behaviours into direct and indirect methods for victimisation. Direct cyberbullying entails a perpetrator directly targeting an individual in a closed context where only both individuals are involved. Indirect cyberbully is the opposite, where bystanders can publicly view the victimisation in an open context and can then be shared or saved by multiple individuals. In addition, to the range of behaviours that constitute cyberbullying, individuals also fulfil a range of roles in cyberbullying which the chapter will now discuss.

Cyber-perpetrators

For young people, one of the most prominent predicting factors reported in the literature for cyberbullying perpetration is internet usage. Those who display aggressive behaviours towards others online are more likely to have high frequency internet usage (Patchin & Hinduja, 2006; Mura, Topcu, Erdur-Baker, & Diamantina, 2011) compared to those who are non-aggressive. Having high exposure to the internet for young people has been linked to cyber-delinquent behaviours such as abusive language use, spreading false rumours, and cyber sexual harassment (Lee, 2004). In support, Lee and Ahn (2005) report online delinquent behaviours to be significantly higher for those who spend more than 3 hours using a computer daily. The understanding gained from this literature is vital to reducing cyberbullying perpetration in a rapidly growing technological society.

A strong tendency towards aggression and anti-social behaviours is acknowledged in the literature, linking real world bullying behaviours to the virtual world. Adolescents who are predisposed to aggression (Ang, Tan, & Talib Mansor, 2011), and engage in traditional bullying, are more likely to be perpetrators of cyberbullying (Hinduja & Patchin, 2008; Juvonen & Gross, 2008; Smith et al., 2008; Ybarra & Mitchell, 2004a; You & Lim, 2016). Furthermore, cyber-perpetration is related to holding supportive normative beliefs towards traditional bullying and cyberbullying (Williams & Guerra, 2007), rule breaking problems (Ybarra & Mitchell, 2007), and a lack of self-control (Park, 2012; You & Lim, 2016). It is apparent the internet is not only being utilised as a method for adolescents to aggress between each other but also as a tool for those who are predisposed to aggression.

The central and influential role of parents has been indicated as hugely important in terms of cyberbullying activity. Relational characteristics such as poor parent-child relationships and emotional bonds (Ybarra & Mitchell, 2004b) and poor parental monitoring

(Wang, Iannotti, & Nansel, 2009) have been associated with engagement in cyberbullying in comparison to those who do not engage. Legate, Weinstein, and Przybylski (2019) considered parents' self-report strategies of cyberbullying alongside their child's self-reports of cyberbullying activity to explore how parenting styles may impact on adolescent behaviour. Findings suggested that adolescents that engaged in the least amount of cyberbullying activity had parents who implemented autonomous-supportive strategies such as considering their child's perspective, offering choice, and explaining limitations (Ryan & Deci, 2017). Longitudinal findings support this research, reporting that parental support can protect adolescents from perpetrating cyberbullying and from becoming a victim (Fanti, Demetriou, & Hawa, 2012). The literature acknowledges how key parent roles are in the development of their children and how parents could influence adolescent delinquent behaviours. Research specifically for cyberbullying in this area is however limited and needs to be cultivated for interventions to grasp how to support parents to adapt their own parental styles.

Cyber Victims

Cyberbullying has been reported to be as common as traditional bullying for adolescents (Erentaite, Bergman, & Žukauskiene, 2012). Creating a balance between time spent online and offline has been attributed to stabilising cyber victimisation and perpetration rates for young people. The global PISA Wellbeing report (OECD, 2017) involving 72 countries revealed that 26% of 15-year-olds were extreme internet users (more than 6 hours per day) on weekend days and 16% were on weekdays. High internet usage presents a high-risk potential and increased exposure to online aggressive acts (Mishna, Khoury-Kassabri, Gadalla, & Daciuk, 2012; Rice et al., 2015). The PISA report (OECD, 2017) also reports that extreme internet users have an increased risk of traditional bullying victimisation. This is

supported by Raskauskas and Stoltzs (2007) who found 85% of reported traditional bully victims were also victims of online bullying. Focused research concerning internet usage indicates that cyber victims spend more time on the internet that is not related to school work (Álvarez-García, Núñez, García, & Barreiro-Collazo, 2018) and spend more time communicating on Social Networking Sites (Mesch, 2009; Sticca, Ruggieri, Alsaker, & Perren, 2013). Targeting those young individuals who are vulnerable to acts of online aggression is key to decreasing the prevalence of cybervictimisation.

A consistently moderate overlap between traditional and cyberbullying emerges from the literature leading to the view that the stability of traditional victimisation is a predicting factor for cyber victimisation (Erentaite et al., 2012; Guo, 2016; Smith et al., 2008). This factor should be considered in light of the similarities between both online and offline victim roles in terms of their outcomes as it is these young people who suffer the most. Victims of traditional bullying, who consistently report long term victimisation report the highest levels of maladjustment including depressive symptomology, anxiety, and low self-esteem (Rueger, Malecki, & Demaray, 2011). Gámez-Guadix, Gini, and Calvete, (2015) report mirrored results for victims of cyberbullying, additionally finding an increase for depressive symptoms for this group over the space of a year. From this, it can be surmised that interventions should aim to reduce traditional bullying on the primary basis that it may reduce future cyber victimisation and the exacerbation of negative consequences.

Profiling can be utilised to identify potential victims of cyberbullying for those adults who are in a central position perhaps at home, recreation clubs, or in an education setting. Personality factors such as low social intelligence (Hunt, Peters, & Rapee, 2012), low self-control (Mobin, Feng, & Neudorf, 2017), low emotional control (Hempehill & Heerde 2014), and low self-esteem (Mobin et al., 2017) have been assigned as possible predictors of susceptibility for cyber victimisation. Vulnerability to cyber victimisation can similarly be

attributed to peer support networks. In comparison to non-victims, cyber victims are more likely to feel lonely (Şahin, 2012), be less popular (Vandebosch & van Cleemput 2008), and perceive their peers as less trustworthy, caring, or helpful (Williams & Guerra, 2007). Profiling adolescents for support can be difficult however, as indicators could be bi-directional relationships or inter-related. For instance, evidence suggests that adolescents who report high loneliness (Lathouwers, Moor, & Diden, 2009) and high scoring depressive/anxiety symptoms spend more time online (Oberst, Wegmann, Stodt, Brand, & Chamarro, 2017), which can be a predictor of cyber victimisation.

Cyber bully/Victims

The bully/victim role in cyberbullying has become an area of interest as prevalence rates for the bully/victim group are reported to be noticeably higher online than they are offline (Kowalski & Limber 2007; Wolak, Mitchell, & Finkelhor, 2007). From their sample, Werner, Bumpus, and Rock (2010) report that victims of cyberbullying were 16 time more likely to be a cyber bully/victim in comparison to non-victims of cyberbullying. A cyber bully/victim is a perpetrator of cyberbully who is also a target of cyberbullying (Selkie, Kota, Chan, & Moreno, 2015). A cyber bully/victim could also be a victim of offline bullying who then retaliates and targets their perpetrator online (Beran & Li, 2007; Jang, Song, & Kim, 2014). Recent research provides evidence suggesting that a cyber bully/victim group is more likely to exist than a true cyberbully or cyberbully-only group. For instance, using cluster analysis, Betts, Gkimitzoudis, Spenser, and Baguley (2017) found no evidence of a true cyberbully group within their sample. Festl, Vogelgesang, Scharrow, and Quandt (2017) mirror these findings by implementing Latent Transient Analysis to investigate long term patterns of cyberbullying involvement. Festl et al.'s research suggests little evidence for a

cyberbully only group as perpetrators of cyberbullying were more likely to have experienced victimisation themselves.

It is unclear what the co-occurrence of perpetration and victimisation looks like. For instance, perpetration could be because of retaliation or anger in response to an act of targeted aggression. It could also be possible that an individual is a victim and a perpetrator on two separate, unrelated occasions. Generally, the cyberbullying literature refers to the bully/victim group as those who are in the former category. Strong evidence indicates retaliation or revenge as a frequently reported motive for cyberbullying another individual in response to an attack (Englander, 2008, Francisco, Simão, Ferreira, & Martins, 2015, Raskauskas & Stoltzs, 2007). Retaliation for the bully/victims is triggered by an aggressive act, which then itself becomes an aggressive act. Therefore, the bully/victims' experience of cyberbullying could be viewed as a continuous cycle of aggression.

The probability of being a target of cyberbullying is increased if the target is a perpetrator of cyberbullying (Kowalski, et al., 2014). A potential rationale for victims of cyberbullying becoming bully/victims is the vastly increasing access that children and adolescents have to the internet (Hinduja & Patchin, 2009; Palfrey & Gasser, 2008; Schrock & Boyd, 2008) alongside the lack of social indicators and cues in online communication (Ang & Goh, 2010; Mishna, McLuckie, & Saini, 2009). Additionally, the online environment may also provide a barrier that enables retaliation to feel safer than it would face-to-face (Lapidot-Lefler & Dolev-Cohen, 2015; Suler, 2004). The act of retaliation is however, not chosen by all victims of cyberbullying. Cyber bully/victims have been found to perceive retaliation as much more acceptable in comparison to non-victims of cyberbullying (O'Brennan, Bradshaw, & Sawyer, 2009). Gámez-Guadix et al. (2015) conducted a wide scale longitudinal study, measuring cyberbullying prevalence and behavioural issues between two-time intervals over the space of a year. 72% of the sample who reported to be stable

victims that had experienced high levels of victimisation at both time points were also found to be perpetrators of cyberbullying. Findings from this study concluded that young people need to be aware of how counterproductive retaliation can be. In order to manage and support the bully/victim group, interventions should guide and teach adolescents of the possible implications of their actions.

Bystanders

In addition to victims and perpetrators in cyberbullying, those that witness the act, also known as bystanders, play an important role. Salmivalli et al. (1996) identified participant roles beyond the bullying dyad that could have an influence on the victim or perpetrator to reduce or intensify the bullying situation. In the online environment, the reaction of bystanders can be more ambiguous due to the increased anonymity and autonomy the internet provides (Wong-Lo & Bullock, 2014), but also the lack of authority figures to regulate the behaviour of children and adolescents (Patterson, Allan, & Cross, 2016). Those who do witness cyberbullying can either respond in a positive (i.e., seeking help from an adult/peer and providing emotional support), or a negative manner (i.e., encourage or join in with the bully). As such, the responses of bystanders play a key role in successful intervention and prevention of cyberbullying (Agatston & Limber, 2018). However, there are several contextual and personal factors that can influence or hinder children and adolescents' tendency to positively intervene.

In the context of contextual factors, a number of elements have been implicated in the literature. For example, bystanders that associate friendship with the bully are less likely to offer help to the victim (Macháčková, Dedkova, Sevcikova, & Cerna, 2013), but if friendship is associated with the victim, bystanders are more likely to offer help (Price et al., 2014). In addition, the factor of social support can promote bystanders perceived self-efficacy and

confidence to support the victim (DeSmet et al., 2014; Price et al., 2014). This suggests schools can work to recognise and reward those who positively intervene by promoting effective strategies to assist the victim. When evaluating a cyberbullying incident, children and adolescents also respond based on the severity of the incident. For example, research has shown bystanders are more likely to offer support for the victim when the severity of the incident is deemed severe (Bastiaensens et al., 2014; DeSmet et al., 2014; Macaulay, Boulton, & Betts, 2019), whereas if regarded as mild, bystanders are more likely to attribute blame to the victim (Koehler & Weber, 2018) and offer less support (Macaulay et al., 2019). However, some bystanders may choose not to intervene on the basis of becoming the ‘victim’ (Boulton, 2013; Van Cleemput, Vandebosch, & Pabian, 2014).

In the context of personal factors of the bystander, research has shown increased victim support from those who exhibit higher empathy levels (Macháčková, Dedkova, & Mezulanikova 2015; Van Cleemput et al., 2014). In addition, bystanders with low levels of moral disengagement were more likely to offer support, compared to those with higher levels of moral disengagement who would favour support for the bully (DeSmet et al., 2016). Research has also considered the extent to which prior victimisation and/or perpetration could predict bystander behaviour. For example, young people who have disclosed prior victimisation were more likely to offer support for victims of cyberbullying (DeSmet et al., 2016; Van Cleemput et al., 2014). On the other hand, bystanders with prior experience of perpetration, in online or offline contexts, increased bystanders’ tendency to exhibit negative responses (Barlińska, Szuster, & Winiewski, 2013; Van Cleemput et al., 2014).

Overall, it is clear the role of bystanders plays a prominent role in cyberbullying and should be at the forefront of intervention efforts. Recommendations for anti-cyberbullying initiatives should focus on building friendships amongst peers in a positive school climate. The climate should centre on building empathy, reducing moral disengagement, and providing

strategies for children and adolescents to ask for help when they are a victim of cyberbullying as well as recognising the efforts of those who act as a positive bystander.

Consequences of cyberbullying

Cyberbullying can be viewed as a notably harmful form of psychological aggression. Cybervictimisation has consistently been related to a host of negative outcomes in terms of young people's mental well-being. Being a target of cyberbullying has been associated with elevated symptoms of depression (Menesini, Modena, & Tani, 2009; Perren, Dooley, Shaw & Cross, 2010; Schneider, O'Donnell, Stueve, & Coulter, 2012) in comparison to non-victims. Social anxiety (Dempsey, Sulkowski, Nichols & Storch, 2009; Juvonen & Gross, 2008) and lower self-esteem (Brewer and Kerslake, 2015; Patchin & Hinduja, 2010) are also prominent potential outcomes of cyberbullying victimisation. An increased probability of suicidal ideation and attempting suicide has been an outcome variable for victims and perpetrators of cyberbullying (van Geel, Vedder & Tanilon; 2014; Hinduja & Patchin, 2010; Medrano, Rosales & Gámez-Guadix, 2018). Moreover, cyber perpetration has also been related to similar negative outcomes as victimisation such as depression (Chen, Ho & Lwin, 2017) and low self-esteem (Bayraktar, Machackova, Dedkova, Cerna, & Sevcikova 2015; Patchin & Hinduja, 2010). It is important to look at potential negative outcomes from the view of how to support young people who are involved in cyberbullying and how they cope with the negative experience. For example, when considering the findings concerning self-esteem it may be suggested that those young people with higher self-esteem are less likely to engage in cyber perpetration and are more likely to manage the stress induced by being victimised.

Research has reported moderating factors in terms of negative outcomes of cyberbullying which should be considered to obtain a clearer picture of what research findings indicate. Longitudinal research of two years that controlled for the mental health

baseline of their sample found that only cyber victims that were girls had attributable mental health problems (Bannink, Broeren, Van de Looik-Jansen, de Waart, & Raat, 2014). Gender has also been found to moderate the strength of association for emotional and behavioural issues for cyber victimisation. When traditional forms of bullying are controlled for, emotional problems, such as depressive and anxiety symptoms, were more associated with cyber victims who were female (Kim, Colwell, Kata, Boyle, & Georgiades, 2017). Behavioural, conduct problems were more associated with cyber victims who were male. This suggests that gender may moderate the potential negative outcomes of cyberbullying. When the variance of traditional bullying is controlled, this means that young people who experience cyberbullying do not need also experience traditional bullying to encounter negative outcomes, albeit they are highly relatable (Kowalski, Morgan, & Limber, 2012).

Relative risk perception of cyberbullying

This section will consider relative risk perception of cyberbullying something which is likely to underpin how well received anti-cyberbullying interventions are. There is a robust general tendency for individuals to view themselves as being less vulnerable to potential risks than others, irrespective of the risk (Chambers & Windschitl, 2004; Reyna & Farley, 2006; Weinstein, 1980; Weinstein & Klein, 1995). This tendency to rate others as more vulnerable than the self is referred to as comparative optimism. Comparative optimism represents the extent to which individuals believe that positive events are more likely to happen to them, and negative events are less likely to happen to them, than others (Baek, Kim, & Bae, 2014). Comparative optimism, although similar, is distinct from the third person effect (Davison, 1983). The third person effect relates to beliefs concerning the effectiveness of media messages for the self and others (Metzger, Flanagin, & Nekmat, 2015) such that the self is less likely to be influenced by media messages than others (Davison, 1983). On the other

hand, comparative optimism involves individuals making social comparisons rather than judgements against an objective indicator for an event (Shepperd, Carroll, Grace, & Terry, 2002). Consequently, judgements are based on the likely occurrence of a phenomenon compared to a comparator group. Therefore, in the context of cyberbullying, comparative optimism would relate to beliefs about the likelihood of experiencing compared to a specific comparator group such as other media users.

Typically, people tend to be overly optimistic for their own future compared to others (Roy, 2014). For example, adults report that they are likely to have more fulfilling social connections (Carver & Scheier, 2014), engage in more frequent healthy eating (Sproesser, Kohlbrenner, Schupp, & Renner, 2015), be less likely to be involved in road traffic collisions (Castanier, Paran, & Delhomme, 2012), and be less susceptible to the health risks associated with alcohol consumption (Wild, Hinson, Cunningham, & Bacchiochi, 2001) and mobile telephones (White, Eiser, Harris, & Pahl, 2007) compared to others. Further, holding comparatively optimistic views regarding cardiac health is associated with lower risk and worry leading Radcliffe and Klein (2002) to suggest that comparative optimism serves an adaptive function. Specifically, by holding optimistic views, individuals engage in activities that they ordinarily would not. Further, Metzger et al. (2015) suggest that the likely theoretical underpinnings of comparative optimism relate to self-serving biases, the desire for individuals to maintain positive self-esteem, and a sense of control over situations.

Comparative optimism is not something that just occurs during adulthood. There is also some evidence that adolescents hold similarly optimistic views to those identified in adult samples, although the pattern of results is mixed. For example, American adolescents demonstrate optimistic bias for avoiding intimate partner violence (Chapin, Strimel, & Coleman, 2014). However, when considering health related behaviours, a more complex picture of comparative optimism arises. Adolescents who smoked and felt vulnerable to the

health risks associated with smoking were more likely to report that they had attempted to give up smoking and smoked less than those young people who smoked and held more optimistic views about likelihood of experiencing the health risks associated with smoking (Milam, Sussman, Ritt-Olson, & Dent, 2000). Together, these studies show that there is a tendency for individuals across the lifespan to hold optimistic beliefs in the off-line world; however, a similar propensity for optimistic beliefs in the online world exists.

Focusing on using digital technology, there is an emerging line of research that consistently reports that individuals are overly optimistic when using the internet and believe that positive events will be more likely to happen to them than others and that negative events are more likely to happen to others (e.g., Campbell, Greenauer, Macaluso, & End, 2007). A recent study examined optimistic bias in a sample of university students who used Facebook (Kim & Hancock, 2015). The sample reported that potential negative psychological and social outcomes were more likely to happen to others compared to the self. Similarly, children also display comparative optimism for the ability to determine the creditability of online information: They believe they are better able to accurately establish the source creditability than typical internet users (Metzger et al., 2015). However, the children believed that they were not as skilled as their parents for determining the credibility of sources on the internet. Metzger et al. argued that the elevated confidence and optimistic bias that children report when judging source credibility “may be cause for concern” (p. 523) as children may lack the necessary skills and experience to make accurate judgements. Together, these studies show that adolescents and emerging adults hold comparative optimism for a range of domains relating to digital technology.

Regarding cyberbullying, in focus groups with 11- to 15-year-olds, participants discussed how cyberbullying was something that happened to other people and also how they believed that they were safer than others online (Betts & Spenser, 2017). Although this

perception of safety may reflect the steps that the young people are taking to stay safe online, it is possible that comparative optimism is underpinning these beliefs. Understanding comparative optimism and relative risk judgements for cyberbullying is crucial because the beliefs an individual hold may impact on their tendency to engage with anti-cyberbullying messages and digital literacy training (Betts, Metwally, & Gardner, 2018). Specifically, if individuals think that they are less likely to experience cyberbullying, they may be less likely to engage with interventions or digital safety campaigns because they believe that they are not the intended target.

Betts et al. (2018) examined comparative optimism judgements for the likelihood of experiencing cyberbullying in three age groups: older adolescents, emerging adults, and adults. Irrespective of participant age, there was a consistency tendency for participants to hold comparative optimism beliefs such that they reported that they were safe online compared with other comparator groups. There was also variation in the relative risk judgements according to social comparator group such that those socially close to the individual (e.g., friends) were judged be at less risk than those socially distant from the individual (e.g., strangers). A likely explanation for this effect is that when judging the relative risk for specific individuals and those who are socially close to the self, individuals ameliorate the risk by using similar self-protection mechanisms to those used when they judge their own risk (Perloff & Fetzner, 1986). Specifically, people tend to hold optimistic and positive views of their friends because they are socially close to them. This closeness fuels the perception that friends' behaviours reflect back on to the individual (Pahl, Eisner, & White, 2009). Further, empirical support for this proposition was provided by Paradise and Sullivan (2012) who reported that participants did not judge their friends to be at risk of the potential negative impact of Facebook for personal relationships (unlike other unspecified users). Paradise and Sullivan accounted for this finding by arguing that the close friends'

personal relationships are likely to involve the respondent and, because of this common membership, individuals who are likely to believe that Facebook does not negatively impact on their social relationships will hold this belief for other networks to which they belong.

Gender differences also emerged in Betts et al.'s (2018) research examining comparative optimism beliefs for cyberbullying. Females reported that they thought they and the various comparator groups were at greater relative risk of experiencing cyberbullying compared to males. This finding is consistent with previous research that females are less optimistic than males (Morrongiello & Rennie, 1998; Puskar et al., 2010); however, it may also reflect that there is some evidence that females are more likely to report experiencing cyberbullying than males (Dehue, Bolman, & Völlink, 2008) and, as such, the relative risk judgement may be relatively accurate.

In summary, comparative optimism beliefs go some way to explain relative risk perception in cyberbullying such that older adolescents and adults report that they believe themselves to be at less risk of experiencing cyberbullying than others. Consequently, this has implications in terms of how we develop and target anti-bullying interventions and digital literacy campaigns as those who are optimistic about their own online safety are likely to believe that they are not the intended recipients of such messages and, as such, not attend to them.

Intervention

Research in the area of child and adolescent cyberbullying has gradually become richer in content. This can mainly be attributed to media influence which generally reports the dire consequences of cybervictimisation. ICT is continually developing, enabling new ways to communicate, and providing overall efficiency yet, it is a double-edged sword. The potential risk that ICTs present to children and adolescents specifically should be addressed

appropriately. Increasing awareness and empowerment for adolescents should stem from central roles such as parents and educators that are supported by the community, policy makers, law enforcement, and academia.

Targeted support for those children and adolescents who are most at risk of cyberbullying involvement would be an effective starting point for any anti-bullying programme (Bradshaw, 2015). Literature persistently suggests reducing online activity on the platforms that are used for aggressive purposes could reduce experiences of cybervictimisation (Festl & Quandt, 2013) and opportunities for cyber-perpetration (Mura et al., 2011). Furthermore, concentrated support is needed for young people who are targeted for traditional bullying who are more at risk of experiencing cyberbullying (Raskauskas & Stoltzs, 2007). Tailored support is also needed for the young people who have aggressive tendencies and are known to target others, as they are likely to continue to aggress in the virtual environment (You & Lim, 2016). For future interventions to impact on the prevalence of cyberbullying, these key factors need to be considered.

The unique role that bully/victims play in cyberbullying activity calls for acknowledgement in future plans to manage adolescent aggressive behaviour. The continuous cycle of aggressive that the bully/victim behaviour instigates should be targeted at the route of the aggressive act by leadership roles who are in a position to manage it (Gámez-Guadix et al., 2015; Kowalski & Limber, 2007). Moreover, education for young people around awareness and self-control would be highly beneficial in regard to how retaliation and revenge is counterproductive and can lead to further negative experiences of cyberbullying. Mediated, open discussions between adolescents who aggress against one another could lead to effectively managing negative relationships. Parent support and guidance on managing online aggressive episodes may also significantly affect the prevalence of online aggressive behaviour (Wang et al., 2009; Ybarra & Mitchell, 2004b). Adopting a holistic approach

towards improving normative beliefs about aggressive acts, fostered by school communities and parents, could nurture those adolescents who harbour aggressive attitudes (Williams & Guerra, 2007). Encouraging adolescents to make better decisions around their online behaviour needs to be at the forefront of any intervention in order for instances of cyberbullying to reduce. However, before adolescents can make better decisions around their online behaviour, they need to have accurate perceptions of the relative risk of experiencing cyberbullying.

Conclusion

Despite the disparity between reported cyberbullying prevalence rates the potential to experience associated negative consequences that are attributed to cyberbullying activity pose a serious threat to young people. The ubiquitous presence of ICT and accessibility to the internet enables children and adolescents to benefit from fast and efficient communication, which can also be used as a weapon. Victims who are traditionally bullied are more likely to be cyberbullied and those who cyberbully others are also more likely to bully others traditionally (Smith et al., 2008). There is a clear overlap between traditional bullying and cyberbullying that leads some academics to believe that cyberbullying is an extension of conventional bullying. However, the unique characteristics that online communication provides creates a difference between traditional bullying and cyberbullying. For instance, the internet provides the scope for an unlimited audience, and as such, cyberbullying can have an increased number of bystanders who witness the behaviour. Research is still in the process of examining how these differences can be measured, how they may impact on victims of cyberbullying, and how to hinder the perpetrators who are utilising them. Currently, there is a great deal of research that can be cultivated and practically applied to children and adolescents by those in central positions.

Future research needs to address the limited amount of literature concerning cyberbullying prevalence for children aged below 11 who are accessing the internet at young ages. The cyberbully/victims who are victimised but also cyberbully others are a pronounced group within the literature. Kowalski and Limber (2013) found the cyberbully/victim group in their research to have the strongest association with psychological and academic issues. From the findings of this research, it could be surmised that cyberbully/victims experience the combined emotional and behavioural negative outcomes of a victim and perpetrator. The focus of interventions may benefit from viewing cyberbullying not only as a linear interaction but also as a cycle of aggression. Furthermore, incorporating awareness that enables young people to perceive cyberbullying as a potential risk related to themselves may also contribute increased engagement with the interventions.

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